

## ABSTRACT

The present invention relates to novel therapeutic and diagnostic arrays. More particularly, the present invention is directed to dendrimer based multifunctional compositions and systems for use in disease diagnosis and therapy (*e.g.*, cancer diagnosis and therapy). The compositions and systems generally comprise two or more separate components for targeting, imaging, sensing, and/or triggering release of a therapeutic or diagnostic material and monitoring the response to therapy of a cell or tissue (*e.g.*, a tumor).